

Forest Working Plans

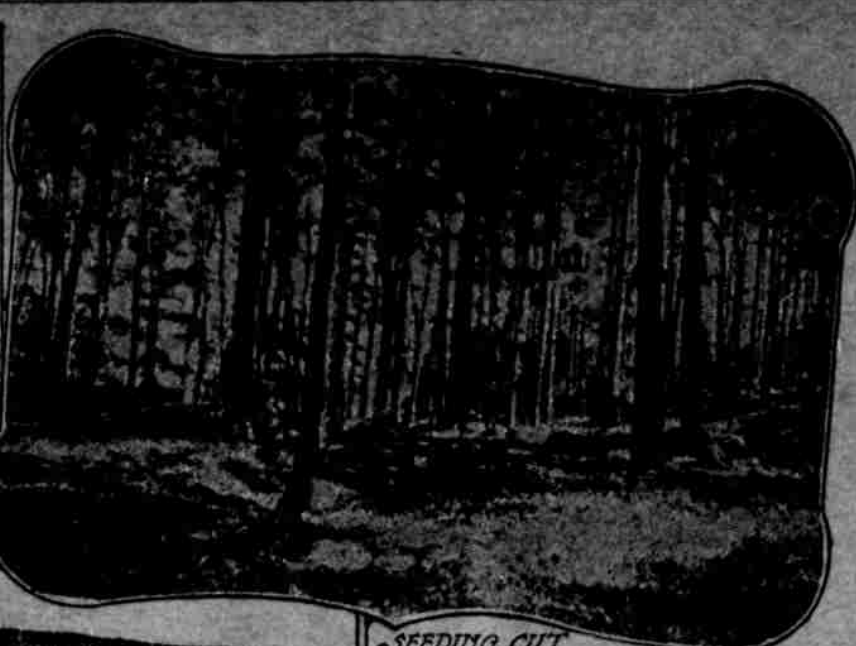
By W. K. WILDES, M.F.

MY disposition on the part of the owners either of forested tracts or areas suitable for reforestation must, in the large majority of instances, be prompted by the expectation of financial gain. A few cases where this does not hold, embrace land owned by the state, water companies in a few instances, clubs and a small number of individuals. To this latter group of owners, the income from their holdings is not as important as the purpose to which a well-forested and properly managed area will be put, whether it be for its utility or aesthetic value. The large majority includes lumbermen, and owners of smaller areas, who have made their investment upon a strictly business basis, and who expect a suitable return from the same. If the forester can show the possibility of such a return, and at the same time provide for the preservation and improvement of the stand, he then advances the practical side of the practice of his art.

He may be dealing either with a large area, involving many conditions as to topography, character of timber, rate of growth, etc., necessitating different methods of cutting to obtain desirable reproduction, a future supply of stock, protection from windfall and fire, or, he may have simply a wood lot problem to solve. In either case, it is the results that owners are



PASTURE LAND PLANTED IN WHITE PINE



SEEDING CUT IN A MAPLE STAND

area of each, with the exception of meadow land, in order that the total could be divided into ten equal parts for annual treatment. Upon each wooded section the total stand of material was estimated, both in board feet and cords, the system of management and the character of thinning necessary was prescribed, and the material to come out the first year marked. Where a reproduction cutting was recommended, provisions for keeping out grazing were made.

Upon each section of pasture land the necessary planting and species were determined, together with the fencing required to prevent grazing and killing young planted material.

In the office, a map was prepared showing each class of land together

A FINE EXAMPLE OF NATURAL REPRODUCTION

scientific sacrifices as are necessary, and not making the plan as he, himself, would prefer.

He then should make a thorough study of the markets of the region and plan his cuttings accordingly. Different localities vary in their ability to absorb a wide range and class of material. Cord wood may have no value, or it may be worth 25 cents or \$1 a cord on the stump, and so on up through the higher class of forest products. Failure to understand these conditions thoroughly, and the demands of a region, may mean the financial failure of a plan. Oftentimes these local conditions preclude the possibility of certain provisions highly desirable from a technical standpoint, but which for practical reasons are impossible. In other words, the practical must be given full consideration along with the technical.

With complete co-operation between forester and owner, and a disposition on the part of both to make the necessary sacrifices, together with an understanding on the part of the former of the really practical side of the problem, there should be less and less cause for the abandonment of the provisions of working plans made for definite periods.

The first working plan in Vermont under the state forest service, was made by the writer while engaged as assistant to the state forester. The area treated is owned by Dr. William Stanford Stevens of Albans, Vermont, and is located at Enosburg, in the same state. An outline of the work and its provisions follow.

The area involved embraces 900 acres, divided as follows: Woodland, 360 acres; pasture land, 344 acres; meadow, 196 acres.

The conditions that led the owner to consider the possibilities of forestry were these: The area had been maintained under a more or less diversified system of farm management, and as the owner did not live on or near the property, he wished to be relieved of the care and attention that such an arrangement involved.

To accomplish this purpose it seemed best to bring the three classes of land under a definite and permanent system of management through the provisions and maintenance of a forest working plan.

1. To complete the treatment of the whole tract at the end of ten years.
2. All woodland to be treated is divided into ten equal areas, one to be thinned in the fall and winter of each year.
3. All pasture land is divided into ten equal areas, one to be planted in the spring of each year.
4. All meadow land will be maintained as such.
5. For each wooded area, the kind of thinning to employ is stated; also a rough estimate, together with net value, of the amount to come out.
6. For each area to be planted, the species are selected and the number necessary given, together with the total cost of the work.

The woodland is mixed, hardwoods consisting of sugar maple, yellow birch, beech, and a small percentage of ash, basswood, poplar, ironwood, cherry and elm, with young hemlock and spruce reproduction well established on a few sections. Sugar maple reproduction is especially good, and with ash and basswood is particularly desirable.

In treating this area either reproduction or improvement thinning was prescribed, removing all undesirable and over-mature species and such mature species as seemed best for the requirements of the area. Thus only desirable species were left to reproduce as well as to become more valuable through increased growth.

In carrying out the field work for this plan, the area was first surveyed both by boundaries and types of land. It was necessary to ascertain the

with the specified area to be thinned or planted each year. For example, 1910-1911-1912, etc., denote the year in which the area is to be cut, which I, II, III, etc., denote the area and order of planting; I to be planted in 1910, II in 1911, etc.

In the written plan a complete statement of the treatment of each section, both cutting and planting, is given for each year. For example:

Woodland, 22 acres will be thinned, 1a being clear cut for planting. Planting, 32.41 A will be planted with white pine, namely 1b, c, d and e. 1a is not to be treated; 1d has been staked out. The other acres have definite boundaries. On this area there is sufficient cord wood available to make its removal profitable.

Woodland, 20 acres will be thinned. Of this area 7.8 acres in the lot by the sugar-house have been marked for a reproduction cutting. Tract Vb will be clear cut for planting. Planting, Tract II, 37.36 A will be planted with white pine. All apple trees, brakes and hard hack are to be removed.

OUTLINE FOR CUTTING.				
Years.	Board.	Feet per M.	Cords.	Sale Price
1910....	30,000	\$105.00	130	\$39.00
1911....	22,000	77.00	240	72.00
1911....	22,000	77.00	240	72.00

OUTLINE FOR PLANTING.				
Year.	Block.	Area, Acres.	Species.	Number.
1910....	1 b	10.56	White pine	12,000
	1 c	2.38	White pine	2,400
	1 d	17.24	White pine	17,240
	1 e	2.24	White pine	2,588

(The acreage of woodland to be treated is cut down from the total 360 by the fact that about 150 acres was being cut over under a contract made previous to the adoption of this plan. It accounts for only 22 and 20 acres coming under management for the years given above, which is, of course, not one-tenth of the total area of woodland.)

It is estimated that the total receipts from the cutting, including the tract being cut under contract above mentioned, will pay the complete cost of planting and seedlings.

The plan just outlined means that at the end of the ten-year period the owner will have his woodland under a good system of forest management, and greatly improved over its present condition, together with 344 acres planted to Norway spruce and white pine, the cost of which being met as before stated by the returns from the area itself. The returns from thinning which will be made on each section in the period from 1935 to 1945, making each section thinned 25 years old, will give a considerable return. At this time about 400 trees per acre will be removed. From 1950 to 1960 the area will be clear cut by sections and replanted. The total yield from this cutting should be at least 30,000 board feet per acre. The plan also provides for proper fire protection, which is absolutely necessary for the successful maturing of a plantation. It also states the conditions which any contractor must meet who makes the cuttings during the next ten years. These conditions follow:

1. All trees to come out are blazed and stamped with the letter "V."
2. The contractor must take all marked and leave all unmarked trees.
3. Care in felling must be taken in order that young growth and reproduction will not be injured.
4. All sound logs 6 inches at the small end and over are to go into lumber.
5. Sound down timber and tops of felled trees are to be cut into cord wood.
6. Care must be taken in skidding logs not to injure standing trees and reproduction.
7. The contractor will be liable to a penalty of twice the value of any tree that is cut not bearing the official stamp.
8. All work is subject to inspection.

The state forester also agrees to mark the trees to cut each year. While the owner himself will not enjoy this return, the plan offers an example of the instance cited previously by which an individual is willing to make a long-time investment in order to make it possible for the next generation in his family to enjoy the results.

TALES OF GOTHAM AND OTHER CITIES

Gotham Fat Women Outrun



NEW YORK.—Why are there so many fat women? A man rushing upon his doom asked this question. He spoke of the increasing prevalence of large feminine persons, not with admiration, but with profound dismay. "Why are there so many fat women?" he reiterated. "I have watched the passing throng in several cities and while one fat man was passing I have counted not fewer than four fat women. This ratio has held true whenever and wherever I have had occasion to take observations. "These women are, for the most part, between thirty-five and fifty-five years old. They either waddle ponderously or propel themselves forward with not the slightest perceptible freedom of motion, looking the while like statues moving on rollers. The alarming corpulence of our middle-aged women is getting serious. They seem to be fattening for a slumberous old age. "If one looks about in New York theaters and restaurants the conclusion that the New York women seen there are about twenty pounds overweight looms large and inevitable. And in those restaurants lies the ex-

South-TT'S UNSETTLED

planation too much heat for here is "We time kn... tals, al... ly Rising ar... York... ected Tonigh... at Go... morrow. "The one... Nov. 3.—Th... he was 'et... tion of the... and rain may be... Saturday. The... But while... who will test... perception of... York women, there... viduals who know ab... ending... matter. They are th... decid... made suits and gown... ed toda... ment stores. One o... opriatio... woman who draws a... in the... the most conservative... ch... York, said: "New York women... enormous. Today the... tomer in our store weighs... "The reason why Americ... do not look well in the hot... because they are too la... French women have co... small hips and they can aff... their gowns pulled in at... Skirts are narrower than... year, and I am sure I do... how New York women are... wear them."

Moving Picture Shows Grip Chicago

CHICAGO.—The moving picture show is putting baseball far in the shade in its bid for popularity. In Chicago there are four persons who attend moving picture shows for every one that attends a baseball game. Moving picture "fans" are becoming more and more numerous, and their patronage is becoming so popular that the proprietors are giving more than 30 per cent. more pictures for a nickel than they did a year ago. The records of the moving picture bureau of the police department in charge of Sergt. Jeremiah O'Connor show that there are 556 shows in Chicago. Besides these, all of the large vaudeville houses are running moving pictures, and the craze has reached such proportions that the centrally located theaters even are presenting pictures between the acts.

The first moving-picture shows were established in 1908. The first neighborhood theaters were located in remodeled store buildings. The public took to them quickly and they grew in number rapidly. All were not successful, principally because every Tom, Dick and Harry who had a few dollars to invest bought a moving-picture machine, rented a place and made a bid for patronage. Those handled by experienced showmen prospered. A moving-picture inspection bureau was established, and after the usual red tape and delay it got down to working order. The Chicago bureau has been so well handled at all times that it is acknowledged to be the best in the United States. Seventy thousand feet of films are inspected every week by the bureau. The seven police officers in charge are responsible for the supervision and censorship of all the theaters in the city, their inspections extending to both sides of the footlights. Souvenir postal cards offered for sale in Chicago also are under their inspection. From two to ten sets of pictures are rejected each week. "Cutouts" are ordered in perhaps an average of a dozen sets of films each week. The police censors order cut every scene which if enacted within their sight would be prohibited by law if presented in reality.

Kansas Hiking Clubs on Long Trudge



TOPEKA, Kan.—If walking is good exercise for the city man on Sunday, why is it not good for him on any other day of the week? That is a question which not less than twenty hiking clubs are considering in as many Kansas towns. Golf and automobile are threatened by this new system of exercise. Edward Payson Weston when he walked through Kansas a year or more ago started the idea of hiking clubs among the business men of the towns and cities. In forty or fifty towns clubs were formed to go on walks on Sunday morning. Sunday was chosen because it was the only day the business men could devote to exercise. Now they are planning in several towns to make two or three hikes each week. An early morning walk and a fried chicken breakfast five or six miles out in the

country is something to think about. The business men organize a walking club, the Peripatetic club or the Weston Wabblers or something like that, and select a captain. It is the captain's business to pick out the road over which the hike will be made on Sunday morning and notify his company. Another of his duties is to have a conference with Mrs. Jones or Mrs. Smith or Mrs. Brown, who happens to live five or six miles out on the road selected, and arrange with her to have ready a steaming hot breakfast of fried chicken, brown gravy, biscuits and alfalfa honey at seven o'clock. Usually the price for such a Sunday morning breakfast out in the country is 50 cents a plate.

During the last summer the farmers' wives who have prepared these feasts for the hikers have been astir early. They watch down the road for the column of walkers to come over the hill, and then they take the biscuits and fried chicken out of the oven. The table is always set when the men arrive, and it is the evidence of every Kansas woman who has entertained the hikers that they are hearty eaters.

Western Cities Are to Have Pennies

SALT LAKE CITY, Utah.—After years of turning up noses at cheap people of the east who would need such a small coin as a penny in doing their daily business, there has been developed a real call in the west for these same coins. It is largely due to the feeling of the housewives that much money could be saved in their buying at the shops and in other ways if they had the small pieces of money. A movement has been put under way for the banks to import the coins, and some of the shops are already advertising wares for sums that change into pennies.



When an inquiry was recently made into this subject by persons interested it was found that less than 20,000 pennies were in Salt Lake City. Many of them were held by the banks, which said they had difficulty in disposing of them. As in other cities in the west, the nickel had been the small coin,

and the easy spenders had treated even that somewhat contemptuously. The newspapers sell for five cents a copy. Children have been brought up to the idea of asking for a nickel for candy and spending it. Now the cost of living is coming home even to the free-spending west, and housewives have found that it is not only well to look after the nickels, but the pennies, too. It is pointed out that under the present system if a purchase comes to an odd amount the total is put up to make the even nickel for the shopkeeper.